ABSTRACT

A cellular wireless communication system and method of operation manages Walsh codes in order to ensure that sufficient Walsh codes are available to prevent call blocking and to support additional hand-off operations. In an initial operating condition, the cellular wireless communication system services normal hand-off operations in which a maximum number of cells and sectors may participate in hand-off. With hand-off operations according to the present invention, each cell or sector participating in hand-off for a mobile terminal uses a unique Walsh code for covering its forward link signals. When the number of Walsh codes available for servicing new calls is reduced so that it meets or exceeds a Walsh code availability threshold, the number of cells and sectors that may participate in hand-off is reduced from the maximum number. In the number of participating cells/sectors results in release or non-use of some Walsh codes. In subsequent operations when sufficient Walsh codes are available for servicing hand-off operations, a greater number, up to the maximum number of cells and sectors may again participate in hand-off of the mobile terminal.